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ABSTRACT

This qualitative research, based on interviews with 30 secondary-level cooperating teachers, examines the student teaching experience from the perspective of the cooperative teacher. In the interviews, cooperating teachers identified many changes in their own classroom practices that occurred as a result of their experiences with student teachers. Changes fell into the following categories: (1) teachers include new curricular content material; (2) they learn and adopt new pedagogical methods and concepts; (3) they add new strategies or tactics for motivation, presentation, and assessment to their "teacher bag of tricks"; and (4) they improve their immediate teaching practices as a response to the daily presence in the classroom of the student teacher. Excerpts from the interviews are included and many give specific examples of ways teachers improved because of their experience supervising student teachers. (Contains 20 references.) (JDD)

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Improving Classroom Practice:

Ways Experienced Teachers Change After Supervising Student Teachers

by

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Improving Classroom Practice:

Ways Experienced Teachers Change After Supervising Student Teacher

The issue

Every year thousands of veteran classroom teachers share their time, their students, and their wisdom of practice with education students who are "practice teaching". Cooperating teachers, those experienced teachers who supervise a student teacher, usually view student teaching as an opportunity for the novice, a time to concentrate on the growth and development of the student teacher, and the student's first induction into the real world of teaching. Even though student teaching is a one-time event, most teachers consider their student teaching as the most instructive part of their entire pre-service education (Woodruff, 1946; Conant, 1963; Feiman-Nemser, 1983). After the novices complete their assignments and return to their campuses, however, those regular teachers remain in the classroom. Many of them will have other student teachers. Is this experience instructive for the cooperating teachers? Is this effective professional development? When they look back upon the experience, do cooperating teachers think that they themselves profited from supervising a student teacher?

Objective and Significance of the study

"Probably nothing within a school has more impact on students in terms of skills development, self-confidence, or classroom behavior than the personal and professional growth of the teacher" (Barth 1990, p. 49). This research identifies changes that experienced classroom teachers make in their actual classroom practice--changes that improve their effectiveness--as a result of supervising a student teacher. Studying the student teaching experience from the perspective of the cooperating teacher should yield

information relevant to education schools (regarding their roles and goals in student teaching situations), to schools and school systems (regarding their assignments of cooperating teachers and their attitudes toward participating in student teaching efforts), and--most of all--to practicing teachers who are looking for ways to enhance their own professional development within the regular working day and the context of their own classrooms.

Perspective and methodology

This qualitative research is interested in professional development efforts which consider the teacher as a learner and respect the power of teachers' own contexts to provide a fruitful environment for their improvement. The research relies on data derived from semi-structured interviews lasting approximately one hour between the author and a non-random sample of thirty cooperating teachers representing five different school districts. Interviews, recorded by permission, were transcribed into written transcripts. Citations to transcripts in this article refer to teachers, by their assigned codes, and lines.

Cooperating teachers who participated in these research interviews speak from personal experience. Because they are referring to themselves, to their familiar pupils and schools, and to their own student teachers, they speak with conviction. Because they refer to their own practice, their own experience, and their own contexts, they speak with specificity.

Theoretical framework

All teachers need to grow, to improve, to discover unique and effective ways of understanding their material and their students and the "calling" of teaching. They need to continue to improve their skill at making course content accessible to their students while

awakening these pupils to the satisfactions and rewards of learning (Little, 1981; Holmes Group, 1986; Barth, 1990; Byrne, 1991).

Moreover, most teachers want to grow. "The vast majority of teachers are professionals who take pride in their work and strive for knowledge and skills that will enhance their instructional abilities" (Davis and Thomas, 1989, p. 174). From department chairs and principals to union leaders and superintendents, education leaders point to development -- for individuals as well as for entire staffs -- as a powerful force for improving new, weak, or struggling teachers as well as for inspiring fine teachers eager for sustenance, challenges or new ideas (Dewey, 1904; Bolin and Falk, 1987; Berman, 1987; Orlich, 1989). Sternly worded by Adam Urbanski, Vice President of the American Federation of Teachers, "Continuous learning is not an option for educators; it is a mandatory and professional responsibility" (in Orlich, 1989, p. 180).

Much research literature wrestles with issues of change, documenting assumptions about change (Jackson, 1971; Zaltman et al, 1977; Hall and Loukes, 1979; Orlich, 1989; and Schlechty, 1990). But rarely does research catalogue actual changes that teachers say they make in their practice.

Participants

The study focuses on secondary school teachers. This is significant, for most previous research on student teaching and cooperating teachers derives from elementary grades, which differ from secondary contexts in many ways, including structural organization (departmentalization by subject matter expertise), student-teacher relationships, and professional collegiality (Brophy and Evertson, 1976; Little and Bird, 1987; Johnson, 1990; McLaughlin et al, 1990).

Some of the teacher participants have been recognized as effective teachers by their peers, department chairs, or administrators. Some have particular responsibility

and training to supervise their own and other student teachers during their assignment to the school. Some of these cooperating teachers are recognized leaders in their schools, serving in positions such as department head, grade level chair, or curriculum supervisor; but others, on the other hand, are "regular troops," neither chairs, selected representatives, nor award winners.

The participants teach various subjects: English, history, social studies, math, science, foreign languages, art, physical education, music, special education and English as a Second Language. This variety lends interest to the study because the one constant variable is the cooperating teacher role, regardless of class content. Participants all teach in public schools, but at various levels, from middle school (grades five or six through eight) to high school (grades nine through twelve). Again, the independent variable remains the experience as a cooperating teacher.

Findings

In general, the role of cooperating teacher has enormous potential as a vehicle for effective professional development for experienced classroom teachers. Research findings include several, not discussed in this particular paper, with significance for professional development efforts: The teachers credit the supervision process itself for promoting opportunities for reflection, stimulation, and satisfaction; they feel more connected and committed to teaching as a profession, partly because of their sense of being part of an important continuum, passing the torch to the next generation of teachers; and they identify many specific conditions of program, setting and personality that promote--and impede--their professional development during the supervisory situation. Finally, and the subject of this report, cooperating teachers identify many changes in their own classroom practices that occur as a result of their experiences with student teachers.

The changes seem to fall into several categories:

1. They include new curricular content material;
2. They learn and adopt new pedagogical methods and concepts;
3. They add new strategies or tactics for motivation, presentation and assessment to their "teacher bag of tricks";
4. They improve their immediate teaching practices as a response to the daily presence in the classroom of the student teacher.

1. Experienced teachers include new curricular content material

Classroom teachers state that as competent as they may be, or as expert as they think they are in some areas, they know there are lots of things that they do not know. Their student teachers often introduce unfamiliar works of music, art, literature, criticism, history or research; they share awareness of other cultures. They bring expertise with computers, calculators, synthesizers, video disks and tapes and many other technologies that the experienced teachers are eager to learn and use. To the experienced teachers, all of this becomes grist for the mill, new things that they consider incorporating into their own future lessons.

A social studies teacher explained the benefit of one student teacher: "She introduced me to some materials she was familiar with in terms of subject matter. And that was very interesting. Her area of expertise was East Asia, so in that area I was able to get a lot more, content-wise" (Teacher L2, 97-100). Another social studies teacher reported something similar: "This student teacher has extensive course work in Asian studies, which broadens my knowledge and perspective. In fact, he is Korean" (Teacher I1, 98-90). A music teacher described a similar advantage: "It's good to hear what the student teacher is being told is good music for band. Or to hear what the student teacher

thought was good music in the high school program he came from" (Teacher K2, 207-208).

Some teachers specify curricular items which expanded their repertoires:

> I learned a tremendous amount from student teachers. From one, I learned about the beauty of the Northwest Coastal Indians. She did a mask unit with my students. It opened a whole new door for me. With another student teacher I've learned a tremendous amount as well. She is a painter and has inspired me in my own work about painting style as well as teaching me more about teaching painting.
>
> . . . Another student teacher wanted to do the culminating activity of the watercolor unit. I suggested cubism and then she extended it by the way she did it, which was to do three different views of a still life on tracing paper, overlap the three views, do a final tracing, and then take that tracing and do the final watercolor. This has been brilliant; the students learned so much art. The work is on display in the library now. It was a wonderful way to do the cubism assignment, and one I would never think of doing.
>
> (Art Teacher L4, 89-91, 103-109)
>
> One student teacher who worked with me in biology and earth science classes was very interested in outdoor education. I am too, but I have not had the same kinds of experiences as he had running outdoor education programs, particularly doing overnight things. So it was great having this experience and getting tips from him about how to do things. It was fun. I still do those things.
>
> I could easily see how a student teacher could be with me who had a strong subject matter background in an area in which I am not so strong. If I were teaching physics or chemistry, which could happen, the student teachers might have a stronger preparation than I did in the area, so that I would learn from them.
>
> (Science Teacher D1, 31-39)
>
> I had a student teacher who introduced me to Tilly Olsen, the short story writer. I had not taught much contemporary fiction. It's difficult, you know, in a school where the books are already bought and the curriculum is taught because of what you have in the book room. I think that this student teacher reminded me that the easiest way to be innovative is with something like a short story. It can be, ah hem, copied. I do that with poetry all of the time. But I use Tilly Olsen's story "I Stand Here Ironing" as a direct result of that experience with the student teacher. And there is another story I use now, "Everyday Use," by Alice Walker, that a student teacher brought.
>
> (English Teacher N1, 204-211)
>
> In studio art she had a different approach from me. She used a slide presentation to focus on reading emotions from the ways figures hold themselves. Then she had the students derive drawings of emotions.

> She also did a wonderful book, illustrating each page with a personality trait. These are some of the many things the student teacher did that are probably part of my own repertoire now.
> (Art Teacher L6, 41-48)

Several teachers credit their student teachers with introducing them to technology that they then employ to extend their curriculum in many ways. Computer literacy sometimes entered classrooms via student teachers before school systems offered workshops and training (Social Studies Teachers J2 and L1; English Teachers G1 and B1; Math Teacher J1).

2. Experienced teachers learn and adopt new pedagogical methods and concepts.

The experienced teachers say that student teachers bring with them awareness and enthusiasm for new pedagogical methods and concepts. Some pedagogical methods are new to the cooperating teachers, such as concept attainment, alternative methods of assessment, or jeopardy-type competitions adapted to various curricula.

> My last student teacher used "concept attainment" and now I use it all the time--it is a nice addition to my repertoire. For example, if I am teaching the concept of nuclear war, I would have the students set up comparison lists of Hiroshima and Berlin. Then I elicit lots of facts and compile them under each heading. And then I let the students eventually deduce the bigger concepts from the accumulating details that they bring to the lists of facts. Little by little the lists become more revealing and the concepts more apparent. That is fun.
> (Social Studies Teacher H2, 89-94)

Some pedagogical ideas are not new, but the cooperating teachers see possibilities for application for the first time, or feel inspired to attempt them because the student teacher attempted them. Examples of these included team teaching, cooperative learning, grouping strategies, high expectations for all children, and considerations about test construction.

> The student teacher learned cooperative learning at the university and wanted to try it in my classroom. He asked, "Can I use this?" And I said, "Yes." . . . Sometimes I need to be forced to change, I must admit. And this forced me to change. I was never too big on cooperative

learning, although some teachers here use it extensively. But I never made the effort to bring it to my classes until I saw how to do it well. Only then did I change from five rows, seven kids in a row, me standing at the front giving a lecture.

Then when I wrote a conflict resolution curriculum, I knew I had to incorporate the methods I had learned with my student teacher, and which other teachers used. This changed my mind set. I had to use both small and large groups, twenty-to-forty-minute activities. I had to monitor closely, interact, move among the students constantly. It made a big difference in my teaching forever.

(Social Studies Teacher I1, 57-70)

There were a number of things that she did that I learned from. She was particularly good organizing various types of cooperative learning, an area that I've never been very strong in. I learned quite a bit by working with her, planning a couple of things and observing her doing some cooperative learning activities. One we planned had the kids look at court cases about rights. Different groups of kids would prepare different cases and then we would bring them all back together and use the different cases to recognize the bigger theme.

. . . I've incorporated it into the class since then, but I still don't feel as competent as I would like. There are times where the curriculum puts certain demands on us, and cooperative learning takes a lot of time to cover what looks like a small area of material. But I could use it and include more ideas and larger amounts of the curriculum as part of the tasks.

(Social Studies Teacher L2, 50-59)

I watched a student teacher use cooperative learning in some classes that I would not have used it in. And it worked with those particular kids, who were in a lower level class. The student teacher gave reading assignments that drew the kids out, got them using poetry, related news articles to the readings, and got them writing. I used these ideas for a while then too.

(Math Teacher J2, 42-45)

When cooperative learning was just a whisper in the county, I had a student teacher who had studied it in college and wanted to try it. I was skeptical, but I thought that it was OK, it was her class. She taught me how to get cooperative learning started. Do I use it? Yes, I do. Not every day, but often.

(Social Studies Teacher J1, 99-105)

Cooperative learning apparently was very hot in the university, but I hadn't heard anything about it. The student teacher used cooperative learning for the slowest class, a class I was frustrated with. She put smart with slow with those between, and gave the same grade to all of the kids in the group. I got so excited that I signed up for the county class in this technique. It took three years to get off the waiting list

and into the class, but I use cooperative learning in the classroom all the time now.

(Science Teacher K1, 150-156)

The student teachers stimulate their cooperating teachers with both specific methods and ways of joining various methods together.

I have seen new student teachers experiment with new types of educational pedagogy that I perhaps was not aware of. Even though I pride myself on trying to stay up on all of this, I have seen them do certain teaching skills, perhaps in a different way, or in a totally foreign way that I had never seen or thought of before.

Once a student teacher took a series of skills with addition and subtraction of signed numbers and turned it into a jigsaw puzzle game. It was almost like a jeopardy-type of thing. She gave the problems to certain kids and the answers to others. Then it became a matter of trying to match answers to questions. And that's how she formed her pairs. Whoever had the answer to a problem became that person's partner. It was just random. But it was a way of doing some mathematics in a cooperative learning situation. It was a real nice activity to do two things at once. I use this myself now. Kids really like it.

(Math Teacher K4, 125-140)

Several teachers credit their student teachers with reminding them of the optimistic high expectations they should hold for all of their students:

I always learn new things from student teachers. . . . Last year's student teacher really wanted to expect a lot from all of the kids. I never really wanted students to memorize poetry, I never required it of them. But last year the student teacher put a small poem on a poster and put it up in the front of the room. The kids got extra credit for memorizing it and doing it in front of the class. I guess that I thought that you had to memorize all of "Paul Revere's Ride" or "The Highwayman" or "The Rhyme of the Ancient Mariner."

About half of each class took her up on it. And a lot were kids you wouldn't expect. I've used memorization since then. So, their techniques and exuberance help me.

(English Teacher M1, 18-30)

I thought that I was the most student-centered teacher in the whole school . . . and then this year in came the gifted student teacher and four first-year teachers who were so far to the left of me and student-centered, that I had not known it existed.

I saw it in lots of little concrete ways. Having the students write the list of activities to do each day on the classroom board. I've had

> students write on the chalk board here and there, but these new teachers were willing to sacrifice efficiency to have the students take ownership for it. And it paid off in all kinds of ways. It developed a community in the class, a new kind of community. It was truly the students' class and the teacher was the person who came in to get things started or add a little flavor here or come up with an idea there. And I had not known that that dimension existed.
>
> (English Teacher 31, 145-160)

Cooperating teachers learned to think about test construction in different ways:

> This year's student teacher spent a great deal of time thinking of tests: What kinds of questions should be on tests, how should they be written? He spent much more time than I put into designing most of my tests. This really caused me to rethink how I do tests.
>
> Because of that I do more types of laboratory tests now. . . . Because of time constraints, I had been using more of the standard tests, with more multiple choice formats and other kinds of typical tests. I guess I had lost touch with the importance of having other types of assessments. This student teacher reminded me of that importance.
>
> (Science Teacher D1, 21-29)

Many of the experienced classroom teachers welcomed the chance to team teach with the student teacher, even though it meant many different things to different teachers. Some of them share responsibility for different aspects of a class period or a unit; some share responsibility for different students or groups within the class; some utilize team possibilities in other ways. Depending upon the skills of both the cooperating and student teachers, and whether the collaboration occurs early or late in the experience, teaming can mean that the student teacher acts as an aide or as a collegial equal (Teacher A1, D1, E1, H1, F4, J1, K3, L1, L4, L6).

Physical education teachers work in situations where an extra person becomes a co-teacher quickly, since during any period students could be in a locker room, in one of several gyms, or outside. Having an extra pair of hands and eyeballs helps enormously. It allowed one teacher to offer ping-pong, which she wanted to try with the students, but could not do alone, since the tables require extensive set-up and take-down, paddles break, and balls disappear easily. That teacher also felt encouraged about teaching

tennis, since "with an extra teacher there, you can say, ahem, I saw you hit that ball over the fence, and the kids go get it, and the games go on (Teacher L7, 127-151).

Many student teachers are required, as part of their university program, to videotape themselves in action. Typically, they do this once at the beginning of their experience, and again at the end. Usually they need share this film treasure with no one else, unless they wish to. Several cooperating teachers felt challenged to submit themselves to the same kind of celluloid scrutiny and found that they learned an enormous amount in their private viewing of themselves teaching. "The videotaping let me see myself. One year I saw how the discussion, which I had thought was proceeding quite well, had concentrated on a single student" (History Teacher L1, 31-34). "Until I saw myself on the videotape, I had no idea how my facial expressions looked. I learned that I conducted with my mouth open in a funny way. I also realized I needed to pay attention to moving on to a new piece sooner" (Music Teacher K2, 361-366).

> I decided to videotape myself and deliberately choose a lesson I had never done before. When I watched the video I was amazed how it immediately took me inside my mind at that moment--I could be right back in that scene. We were doing a poem and sitting in a circle. At one point I got up to pass crayons out to the kids. They were going to draw the images in the poem. But it was very unlike me to get up and do that, to move into the circle. So I was really taken that I had done that. As I watched the video, I asked myself why I did that. I had the sense that I was too far away from many of the kids. Because there were three extra people in the room walking around with the video camera, even though we were ignoring them, they were obtrusive. I sensed that the energy in the room was out of balance and I had to physically get close to each student by handing out these crayons one at a time, rather than passing the boxes both ways.
>
> No one else was aware of this. Without having seen the videotape and having the opportunity to go back and think about it, I'd never have focused on this. But that became a key moment when I realized again the value of observing and paying attention to my own responses.
>
> (English Teacher B1, 95-115)

3. Experienced teachers add new strategies or tactics for motivation, content and assessment to their "teacher bag of tricks"

This is the category to which teachers designate most of the changed practices that they glean from student teachers. These new tricks of the trade vary from the trivial to the profound, from the mechanical to the philosophical, but the reason teachers adopt any of them is because the changes work to more effectively motivate students, convey information, or assess progress.

Among the "wonderful but lightweight" changes are ideas for wall graphics and bulletin boards that "break the old habit of reaching into the file for the tried and true and sometimes tired" (Social Studies Teacher I1, 85-86).

> Sometimes I will learn a new way of doing things, a nice way, an interesting way. One student teacher did a nice job drawing on poster paper. I like visuals, but I would never have thought to take a piece of poster paper home and bring it in all prepared. I'd probably have drawn on the board. He used those poster papers in some nice ways, by covering up things and displaying other things. He was an artist, so in a way, that fit his temperament. I'm not an artist, but I like those techniques.
>
> (Social Studies Teacher C1, 38-43)

Teachers described many student teacher ideas which they still use to deal with the "mechanical nitty gritty" of classroom life.

> My student teacher used a skills checklist. In math, you can't go on to one skill without the other, and his skills checklist was clear and helpful. If we expect the students to subtract negative numbers, and they haven't really accomplished adding negative numbers, we're just piling on problems.
>
> He was a military man, and then an engineer, before coming to teaching, so the idea of breaking everything down worked as a real plus in these math classes. I used to do that, but I guess I got away from it. He did a lot of that, and that helped me too.
>
> (Math Teacher F4, 56-63)

> The student teacher came up with a clean-up procedure for a problem that I have been struggling with for years. Coming up with a plan that is fair to everybody in the class is hard. Her system is what I use now. It is rotational. We divided the class into four groups and each group has a job for the week, but that job is just for the week. If you

> do the sink week one, the following week you do job 2, which is the floor, and the following week you do job 3, which is materials and supplies, and so forth, so that every week everyone has one job for the whole room, but the job changes each week for everybody. So clean-up gets done efficiently, but it's fair too.
>
> (Art Teacher L4, 93-102)

> One thing I learned from a student teacher is so obvious. She was grading matching vocabulary tests, and my key listed the vocabulary words in a list on the left and the definitions down the right. I always did it that way. My student teacher asked, "Why don't you put the space for the answer on the left and then we can fan out the papers and grade ten at a time?" What a simple thing, and now I always do it that way and it does save time. I never thought of it that way.
>
> (English Teacher F2, 88-94)

> The student teacher came up with the idea of taping an area right on the table for each student, a kind of boundary for them to stay in when we print right on the table. I hadn't divided the space before, and this worked out very well. I still do it.
>
> (Art Teacher L6, 35-38)

Some of the student teachers bring ideas which go way beyond nitty gritty to helping convey an idea or teach a skill. A band teacher learned from a student teacher who had extensive jazz experience how to teach tongue use, or articulation, in a new way.

> He used different syllables than I do. He would say "da" for a long note and "dit" for a quick note. This was a different way of closing the musical sound with the tongue and created a different kind of sound. This teaches the articulation that they then do through the instrument. I still do it, to distinguish ways of using the tongue, making different sounds.
>
> (Music Teacher K2, 164-170)

Two different physical education teachers learned new drills to teach sports skills.

> When I did my student teaching we didn't spend a whole lot of time on fundamental skills in basketball dribbling. We spent more time on play time. But the student teacher brought new, different types of dribbling drills where the students get a basketball, dribble the whole length of the gym, do five 360s between their legs with the ball, come back, and make a basket. Having these fundamental skills before you go out and try to play makes for a better game, a more enjoyable class atmosphere.
>
> (P. E. Teacher L8, 68-75)

> In tennis the student teacher made good use of the fence. Since we don't have a lot of playing surface, having kids hitting the ball into the fence was a great idea. It prevented them from having to go chase the ball a lot. We had always used solid wall and courts to do the drills, but she had them working in pairs and hitting into the fence. I still do that.
>
> (P. E. Teacher L7, 45-50)

An English teacher integrated exhibition, modeling, research, composition and revision into a poetry unit.

> Because my student teacher wanted to try out a "gallery walk," an idea from an education course, we posted poems all around the room and each group acted as critics. Then we did it all over again later, but with the students' own poems. I have learned a lot from student teachers because they come with things like this.
>
> (English Teacher G1, 1-4)

Some strategies are hardly new, but two history teachers credited their student teachers with reminding them of the effectiveness of outside speakers: "She brought in someone from the University to speak on constitutions, an expert who had been working with some Eastern European countries about their constitutions. He talked above the kids' level, but I know how I will use a speaker this term" (Teacher L2, 107-111).

Most of the other testimony about teachers changing their classroom practice as a result of the student teacher experience includes examples of learning to use technology or games to motivate or instruct. One math teacher described a student teacher who was a computer whiz:

> He taught me so much about how to use the computer, and not just in math-related areas. When I had to do scheduling for the state functional math tests, he showed me how to manipulate lists and things. I think I really learned more from him than he did from me. He showed me how to involve geometry students on the computer, or on calculators. He was also very clever about bringing in manipulatives and outside little gadgets, particularly for trigonometry, which he was teaching with me in one class. While I might have had some of the ideas, or knew about the theory, he really showed me how to put it into practice.
>
> For example, he used some white tubes and triangles to get all of the exact measurements of the length, width and height of the buildings, to place all of the windows and the exact height, to figure the area of the

> roof, to place every door. It was a wonderful project, and the students did it all through indirect measurement. . . .
>
> Another student teacher brought in string and masking tape and had students do things with trigonometry. Again, I understood the theory, but she made it real. I still teach the introduction to the circle functions in trig using some of the ideas that she just did as part of her lessons. I really get a lot out of ideas from student teachers.
>
> (Math Teacher J1, 80-110)

Other teachers learned to include games in their teaching, recognizing both their motivational and pedagogical value.

> One student teacher invented a great gimmick for reviewing with the kids. [The teacher shows me the game.] It worked wonderfully if you had the kids work individually or in teams to answer questions about history. It was really a concentration game adapted to use with an overhead projector. He made a grid, with little paper covers for each square, and wrote in each square so that somewhere on the grid were pairs of terms that belonged together. So the kids would have to match together, for example, "Braddock" and "English general," or Proclamation of 1763" with "Frontier was closed." It generates a lot of enthusiasm.
>
> (Social Studies Teacher H2, 95-100)

> A couple of student teachers have reminded me about playing games. I tend to get pretty serious. . . . One of the student teachers made up a jeopardy game for Great Expectations. To me, that was just delightful, because here is this huge tome, and then he has the students at the board playing Jeopardy with Charles Dickens and his character Miss Havisham and a category of something. . . . It's that special something that the student teachers bring, because they are young, that sparks me or reminds me of those possibilities.
>
> (English Teacher N1, 184-191)

> After all these years I learned a different technique for teaching a [Spanish] grammar point. One student teacher taught the forms of the verb gustar by using a Garfield comic book from Mexico. She copied the captions that dealt with gustar. The kids loved it. She allowed me to copy the entire book, and I can use it in my classroom. I still use it. It is very helpful, and fun.
>
> (Spanish Teacher K1, 43-47)

For these cooperating teachers, the presence of the student teacher in the classroom can be both instructive (the cooperating teachers learn new things about their students and new ways to teach them), and delightful (they have the opportunity to share the joys, challenges, pressures and responsibilities for their classes).

4. The experienced teachers improve their immediate teaching practices as a response to the daily presence in the classroom of the student teacher.

Classroom dynamics can change when a second adult joins the scene. Several cooperating teachers report that the presence and needs of the student teacher require them to challenge the students in ways that are good for their learning. This is partly due to the role the student teacher plays of student and audience, partly due to the opportunity to utilize two adults in the classroom, and partly due to the need to teach children to be cooperative and responsible rather than challenging and discouraging. These kinds of changes also vary, from the basic physical arrangements of chairs and desks and bulletin boards to the pedagogical decisions to use various content, assignments, groupings or assessments. It means that the relationship shifts a bit between the cooperating teacher and the pupils as the teacher introduces and then increasingly includes the student teacher in classroom activity and then ultimately recedes from the room. The teachers make these kinds of adaptations in order to enlist their pupils in creating a successful student teaching experience, but then if the student teacher leaves before year's end, the teachers have to switch gears again to accommodate the absence. Cooperating teachers often react to these changes by applying thoughtful improvements in their classroom practice.

> The key to success is finding ways to work together and then know when to withdraw. If the student teacher is not having success, then I don't withdraw. Much of the success depends on the cooperation of my kids.

> My students are accustomed to taking responsibility, because I am often out of the class to attend meetings and conferences, but I know that that kind of responsibility does not just happen. I have to work with the kids, sometimes outside of class, to help the new teacher. This means that I am turning the kids into teachers, getting them to help the student teacher as well as themselves. Enlisting the kids this way helps make the student teaching experience work well. It

> assumes an honesty with the kids about their role in the successful class, but the result is good for the kids in all situations, helps their learning all of the time.
>
> (ESOL Teacher A1, 36-43)

In anticipation of the student teacher, many cooperating teachers prepare their students so that they will accept the student teacher by being receptive and cooperative. The exit of the student teacher also prompts many teachers to consider the classroom dynamic with deliberation. After the student teacher leaves, many teachers rearrange their rooms physically in order to "shake the kids loose of one pattern and ready for my teaching style. It is a good time to bring some kids from the rear into the front, create pairs, break up some groups" (Social Studies Teacher I1, 33-34).

> When the student teacher was here, the desks were in rows, but as soon as he left, I changed the setup of the classroom and tried to get into more individual work rather than whole-class structure. . . . I also brought in a point system that some kids need to be motivated to get to work. I think it's good to change occasionally, with or without a student teacher. But when the student teacher leaves, it's an obvious time to change.
>
> (History Teacher G2, 63-71)

The teachers also rearrange their classes in terms of style and content, since the change in teachers suggests other rearrangements. They begin new units, assign long-term projects, take a moment to individualize goals. This break in routine serves to redirect the classes, energizing students and teacher alike.

Cooperating teachers in this study supply myriad specific examples of ways they actually improve as teachers because of their experience supervising student teachers. Several of them found our interviews to be enlightening, remarking that it was unusual to consider student teaching from the point of view of themselves. This study verifies the conclusion by Grossman (1992) that teachers rarely focus on the potential of the role for their own benefit: " . . . the very familiarity of the role and the meanings traditionally associated with it may also work against teachers' use of this role as a

route to personal professional development" (p. 185). However, the role of cooperating teacher can promote effective change in experienced classroom teachers. One Special Education Teacher (F1) spoke succinctly about the ways student teachers can change teaching (59-61): "The student teachers bring in new, updated materials and an enthusiastic approach to lessons. They add change and excitement to the humdrum we might be used to doing. Many times we use their lessons, because they are really good" .

TEACHER PROFILES

Code School, Teacher		Sex M (Male) F (Female)	Race AA (African American) C (Caucasian)	# Years Taught	Subject Taught	Level H.S.(High School) M.S. (Middle School)	Trained? Y (Yes) N (No) S (Subsequent to 1st student tchr)	# Student Teachers	(# exc)	(#ok)	(#weak)
A	1	F	C	23	ESOL	H.S.	S	6	(2)	(3)	(1)
B	1	F	C	17	English	H.S.	Y	5	(1)	(3)	(1)
C	1	M	C	20	Soc. St.	H.S.	S	6	(3)	(2)	(1)
D	1	M	C	5	Geology & Earth Sci.	H.S.	N	2	(2)	-	-
E	1	F	C	37	English	H.S.	N	7	(4)	(3)	-
F	1	F	AA	25	Sp. Ed.	H.S.	Y	2	(1)	(1)	-
F	2	F	C	20	English	H.S.	Y	5	(3)	(1)	(1)
F	3	F	AA	22	Soc. St.	H.S.	Y	1	-	-	(1)
F	4	F	C	20	Math	H.S.	N	3	(2)	(1)	-
G	1	F	C	24	English	M.S.	Y	7	(3)	(4)	-
G	2	F	C	28	History	M.S.	Y	8	-	(8)	-
H	1	F	C	21	Soc. St.	M.S.	Y	2	(1)	(1)	-
H	2	M	C	22	Soc. St.	M.S.	Y	2	(1)	(1)	-
I	1	M	C	23	Soc. St.	M.S.	Y	7	(4)	(2)	(1)
J	1	F	C	18	Math	H.S.	Y	5	(2)	(3)	-

Code School	Teacher	Sex M, F	Race AA, C	# Years Taught	Subject Taught	Level H.S., M.S.	Trained? Y, N, S	# Student Teachers	(# exc)	(#ok)	(#weak)	
J	2	F	C	25	Soc. St.	H.S.	Y	10	(3)	(6)	(1)	
K	1	F	C	20	Spanish	H.S.	N	4	(2)	(1)	(1)	
K	2	F	C	17	Band	H.S.	N	6	(2)	(3)	(1)	
K	3	M	C	20	German	H.S.	N	5	(3)	(2)	-	
K	4	F	C	22	Math	H.S.	Y	4	(1)	(2)	(1)	
L	1	M	C	32	History	H.S.	N	8	(4)	(4)	-	
L	2	M	C	9	History & ESOL	H.S.	N	1	(1)	-	-	
L	3	F	C	21	History	H.S.	N	1	(1)	-	-	
L	4	F	C	9	Art	H.S.	N	2	(1)	(1)	-	
L	5	F	C	25	Art	H.S.	N	2	(1)	-	(1)	
L	6	F	C	21	Art	H.S.	N	2	(2)	-	-	
L	7	F	C	15	Phys. Ed.	H.S.	N	1	-	(1)	-	
L	8	M	C	25	Phys. Ed..	H.S.	S	15	(7)	(7)	(1)	
M	1	M	C	6	English	M.S.	S	2	(1)	(1)	-	
N	1	F	C	22	English	H.S.	N	4	(2)	(1)	(1)	
TOTALS:	F: 21		AA: 2	X=20.5		M.S.: 6	Y: 12	135	(60)	(62)	(13)	
	M: 9		C: 28			H.S.: 24	N: 14					
	30		30			30	S: 4					
							30					

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School Profiles

Note: Because figures are approximations, totals may not always equal 100%.

Abbreviations:

A.A. = African American
Cauc.= Caucasian
Hisp. = Hispanic
Asian Am. = Asian American
Fil = Filipino
T&S = Tongan & Somoan
ESOL = English for Speakers of Other Languages
G.T. = Gifted and Talented students
SBST = Site-Based Supervision Team

Middle School Profiles

School	Grades	# Students	# Faculty	Traits	Demographics
G	5-8	730	54	2 teams (5-6,7-8) SBST	85% A.A.; 11% Cauc.; 1% Hisp.; 3% other No ESOL 34% free or reduced lunch
H	6-8	880	80	3 teams (6,7,8) SBST	57 % A.A.; 27 % Hisp.; 11% Asian Am.; 5% Cauc. 20% ESOL 70% free or reduced lunch
I	6-8	630	42	3 teams (6,7,8) SBST	78 % A.A.; 17 % Cauc.; 5% other No ESOL 50% free or reduced lunch
M	6-8	1300	75	3 teams (6,7,8) 25 teachers in Foxfire magnet	56% Cauc.; 20% A.A.; 14% Hisp.; 10% Asian Am. 10% ESOL 10% free or reduced lunch

High School Profiles

School	Grades	# Students	# Faculty	Traits	Demographics
A	9-12	1286	55	1 of 6 high schools in dist. Open enrollment for district Strong academic reputation	1.5% A.A; 61% Cauc; 18% Hisp.; 3% Fil.; 14.5%Asian Am.; 2% T &S 9% ESOL 12% free or reduced lunch
B	9-12	1200	80	Only high school in this district	5 %A.A.; 51% Cauc.; 23% Hisp.; 8% Fil.; 12 % Asian Am.; 15% ESOL 13% free or reduced lunch
C	9-12	1424	71	1 of 6 high schools in dist. Open enrollment in district Most "high-powered" high school in district	3% A.A.; 53% Cauc.; 14% Hisp.; 4% Fil.;21% Asian Am.; 4% T&S; 1% other. 5% ESOL 5% free or reduced lunch
D	9-12	1700	120	1 of 4 high schools in district Recently merged for desegregation purposes	10%A.A; 52% Cauc; 34% Hisp.; 4% Asian Am. some ESOL some free or reduced lunch
E	9-12	1495	70	1 of 6 high schools in dist. Open enrollment Population shifting from 4-year to 2-year colleges	1.4% A.A.; 48% Cauc.; 13% Hisp.; 30% Asian Am; 4% Fil.; 1.4% T&S 3% Other 6% ESOL 3% free or reduced lunch

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High School Profiles (continued)

School	Grades	# Students	# Faculty	Traits	Demographics
F	9-12	1286	88	contains 9th grade magnet transient population SBST	80% A.A;10% Cauc.; 10% Hisp. 8% ESOL 25% free or reduced lunch
J	9-12	1260	70	Loses many "G.T." students to district magnet SBST	65% A.A;17% Cauc;18% Hisp. 8% ESOL 30% free or reduced lunch
K	9-12	2760	165	Contains Math-Sci "G.T." magnet Mainstreams hearing-impaired students from county SBST	44% A.A; 40% Cauc; 2% Hisp.; 1% Amer. Indian; 13% Asian Am. No ESOL 13% free or reduced lunch
L	9-12	2195	160	Contains county's math/science magnet	33% A.A.; 30% Cauc;19% Hisp.; 18% Asian Am. 15% ESOL 23% free or reduced lunch
N	9-12	1030	90	Mainstreams hearing-impaired students from county	11% A.A; 70% Cauc.; 6.5% Hisp.; 12% Asian Am; .5% Amer Indian. No ESOL 6.7% free or reduced lunch

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